

Work Order ID 117901

May-05-14 11:47:30 AM

117901

Page 1

Item ID: D3108-3

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Decal

Start Date: 5/05/14

Start Qty: 10.00

10

Cust Item ID:

Required Date: 5/05/14

Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan: MLS

Date: 14-05-07

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3108

Rev B1

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 24155 Make per Dwg D3108 Black letter on white adhesive film Manufacture from 3M 7mil masking film p/n 8522CP OR Avery IPM #2031 Material release note required

OK 14/05/14 12

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure Material Release Note is attached

14/05/14 (12)

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

DAS
27
9-89

14/5/14

12

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|--|--|--|---|--|---|--|--|--|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
|--|--|--|--|---|--|---|--|--|--|--|--|

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | |
|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions |
|---|---|---|

| | | |
|--|---|--|
| <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled | <input type="checkbox"/> Other |
|--|---|--|

Work Order ID 117901

May-05-14 11:47:30 AM

117901

Page 2

Item ID: D3108-3

Revision ID:

Item Name: Decal

Start Date: 5/05/14

Start Qty: 10.00

10

Required Date: 5/05/14

Req'd Qty: 10.00

10

Reference:

Accept

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Run Start

NR1

Stop

NR2

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

Identify as per dwg & Stock Location: 87025 0.00

130

Packaging

Memo

0.00

Packaging

12X 14515

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

14/5/15
MLJ 14-05-15

DAS
26
9-88

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | | |
|---|---|---|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|---|---|---|--|---|

Picklist Print

May-05-14 11:47:30 AM

Page 1

Work Order ID: 117901

117901

Parent Item: D3108-3

D3108-3

Parent Item Name: Decal

Start Date: 5/05/14

Required Date: 5/05/14

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP B02.04.22Added Rev.BNG

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D3108-3P *D3108-3P* Decal | | Purchased | No | | | 110 | Each | 0.0000 | 1 ** | 10 12 | | 5/4/14 | (22) |

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

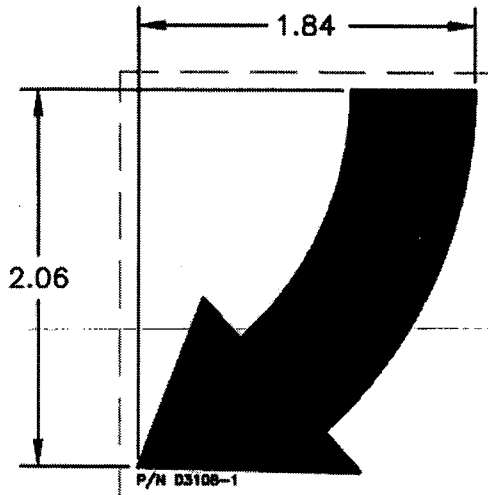
| | | | | | | | | | | | |
|--|------|------|-----|---|-------------------|---|-------------|--------------|--------------|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data <input type="checkbox"/> | | | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | | | |

| FAULT CATEGORY | | | | |
|---|---|---|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |



| | | | |
|------------------|----------------|---|------------------------|
| DESIGN RF | DRAWN BY RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED # | APPROVED # | DRAWING NO. D3108 | REV. B SHEET 1 OF 2 |
| DATE 02.04.01 | | TITLE DECAL | SCALE 1:1 |
| A | 02.04.01 | NEW ISSUE | |
| B | 02.04.17 | ADD -7/-9; ADD TRIM LINES | |
| B1 | 04.05.11 | CHANGE MATERIAL ON D3108-9 | |

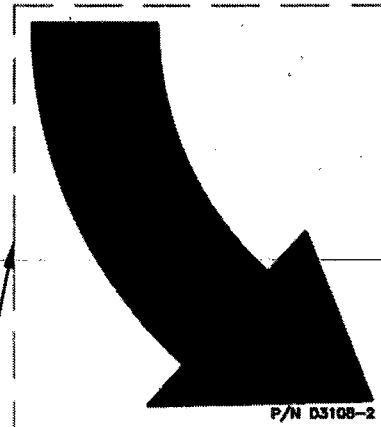
RELEASED
02.04.22



P/N D3108-1

D3108-1

(REPLACES BHT P/N 31-057-3EH)



P/N D3108-2

D3108-2

(REPLACES BHT P/N 31-057-4EH)

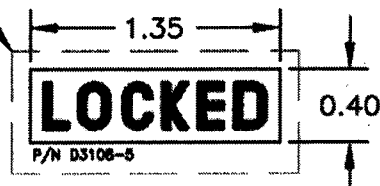


P/N D3108-3

D3108-3

(REPLACES BHT P/N 31-042-7BHF)

TRIM
LINE



P/N D3108-5

D3108-5

(REPLACES BHT P/N 31-042-13DHF)

NOTES:

MATERIAL: BLACK, LETTER ON WHITE ADHESIVE BACK
MANUFACTURED FROM 3M 7 MIL MASKING FILM
#8522CP OR AVERY IPM #2031

TOLERANCES ARE PER QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

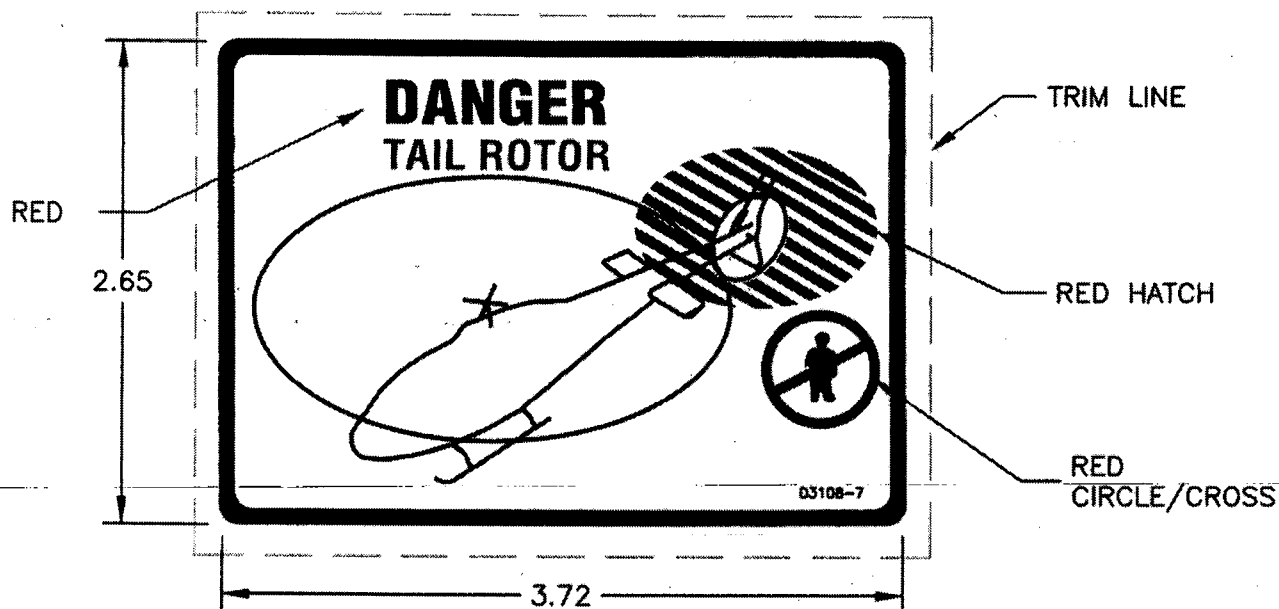
11790 M25
170507

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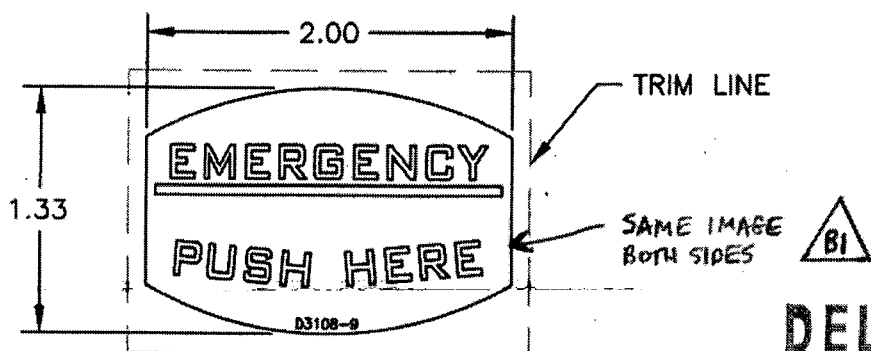
| | | | |
|------------------|----------------|---|------------------------|
| DESIGN RF | DRAWN BY RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | APPROVED | DRAWING NO. D3108 | REV. B SHEET 2 OF 2 |
| DATE 02.04.17 | TITLE DECAL | SCALE 1:1 | |



D3108-7
(REPLACES BHT P/N 31-072-1
AND PREMIER P/N 083-81000-25)

NOTES:

MATERIAL: BLACK (EXCEPT FOR RED AS NOTED) ARTWORK ON WHITE ADHESIVE BACK
MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP OR AVERY IPM #2031
TOLERANCES ARE PER QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES



D3108-9
(REPLACES BHT P/N 212-072-635-101)

RELEASED
02.04.22

NOTES:

MATERIAL: WHITE LETTER ON RED ADHESIVE BACK. ~~MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP OR AVERY IPM #2031~~
MANUFACTURED FROM FLEXCON 4 MIL CLASSIC PLUS
CLEAR VINYL WITH FLEXCON FLEXTONE WHITE BARRIER FILM
TOLERANCES ARE PER QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO24155**

Purchase Order Date 5/9/2014

PO Print Date 5/9/2014

Page Number 1 of 2

Order From :

VC-STU001

STUDIO DE LETTRAGE 2001
210 MAIN WEST
HAWKESBURY, ON K6A 2H6
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAKED
6/9/14/05/16/14

Contact Name

Vendor Phone 613 632 5449

Ship To Contact

Ship To Phone

Ship Via: Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

| Line Nbr | Reference Vendor Part Number Line Comments Delivery Comments | Description/ Mfg ID | Req Date/ Taxable Promise Date | CD | Req Qty/ Unit of Measure | PO Unit Price | Extended Price |
|-------------|---|------------------------|--------------------------------------|----|--------------------------------|---------------|-------------------|
| 1 | D3108-3P AS PER DWG D3108 REV. B B117901 | Decal | 5/16/2014 Yes 5/16/2014 | | 12.00 Each | \$6.67 | \$80.00 |
| Line Total: | | | | | | | \$80.00 |
| 2 | D3428-3P AS PER DWG D3428 REV. A B119007 | Placard | 5/16/2014 Yes 5/16/2014 | | 12.00 Each | \$6.67 | \$80.00 |
| Line Total: | | | | | | | \$80.00 |
| 3 | D4385-1P AS PER DWG D4385 REV. A B118897 | Placard | 5/16/2014 Yes 5/16/2014 | | 12.00 Each | \$6.67 | \$80.00 |

Note:

5/9/2014

**210 Main Street W
Hawkesbury, Ontario K6A 2H6**

Invoice No.: 22196
Date: 05/13/2014
Ship Date: 05/12/2014
Page: 1
Re: Order No. WO12471

Dart Aerospace Ltd
1270 Aberdeen
Hawkesbury, Ontario K6A 1K7

Dart Aerospace Ltd
Hawkesbury, Ontario

| Item No. | Unit | Quantity | Description | Tax | Unit Price | Amount |
|--|------|----------|----------------|-----|--------------|--------|
| | | | PO# 24155 | H | | |
| | | 12 | D3108-3P | H | 6.6667 | 80.00 |
| | | 12 | D3428-3P | H | 6.6667 | 80.00 |
| | | 12 | D4385-1P | H | 6.6667 | 80.00 |
| | | | Chantal Lavoie | | | |
| | | | H - HST 13% | | | |
| | | | HST | | | 31.20 |
| Studio de Lettrage HST: #825007651RT0001 | | | | | | |
| Shipped By: Tracking Number: | | | | | | |
| Comment: Avery, 3M | | | | | Total Amount | 271.20 |
| Sold By: | | | | | | |

****Certificate of Conformity****

Customer:

Studio de Lettrage 2001

Purchase Order #:

PO# 24155

Packing Slip #:

WO 12471

Part #:

Serial #:

Description:

D3108-3P, D3428-3P,
D4385-1P

Quantity:

3 Batches of 12

Certification:

We hereby certify that:

1. The above the listed items were manufactured, repaired and/or inspected in accordance with applicable drawings and/or specifications;
2. All work was accomplished in accordance with the Dart Aerospace Purchase Order;
3. Results of all inspections, chemical or physical tests, as well as other evidence, which shows the acceptability of raw materials, parts and/or assembly components are on file and available for inspection at any time.

Authority:

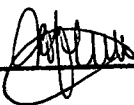
AVERY

APPROVAL:

Natasha B. Lafleche

DATE:

Signature:



May 13th 2014

Title:

Production Coordinator

PRODUCT DATA SHEET



Avery® IPM™ 2031

issued: 01/04/2005

Introduction

Avery® IPM™ 2031 is a high quality pressure-sensitive vinyl film, designed for use on wide format inkjet printers. Avery® IPM™ 2031 has excellent printing properties, allowing crisp print quality with bright and vibrant colours. Avery® IPM™ 2031 offers rapid ink drying and a water-resistant material. It combines good adhesion during its life and easy removal afterwards.

Description

Facefilm: 80-micron premium white calendered, topcoated vinyl.
Adhesive: removable, acrylic based
Backing paper: one side coated kraft paper, 140 g/m²

Features

- Excellent printability
- Vibrant and bright colours
- Crisp print quality
- Spray water resistant with specific pigmented inks
- Good adhesion, excellent removability
- Warranty on outdoor durability

Recommendations for use

A wide variety of full-colour graphics for indoor - and **short/medium term outdoor** applications such as posters, murals, displays, exhibition stands, vehicle graphics etc. Avery® IPM™ 2031 is suitable for application to a wide variety of substrates and will remove cleanly for up to 1 year after application.

IPM media should be handled with care as any surface contamination may affect the print quality. Media should be processed in an environment of 15-25°C and 30-70% relative humidity. After drying, the finished prints should be wrapped in polyethylene film and despatched flat or rolled with the printed side facing outwards. To protect prints against water, UV/light and abrasion, overlamination with a clear film is recommended. For specific details of Avery® DOL combinations, refer to "Technical Bulletin 5.3. Recommended combinations of Avery® Overlaminates and Avery® Digital Print Media"

Always test your combination of Avery® IPM™ medium, inkjet printer and inks prior to commercial use.

Compatibility

Avery® IPM™ 2031 is compatible with a broad selection of inkjet printers, when printing with pigmented, water based inks. For specific details refer to "Technical Bulletin 5.6 Avery Dennison Inkjet Print Media - Printer compatibility".

Durability:

Avery® IPM™ 2031 is warranted for outdoor use in conjunction with pigmented outdoor inks from HP, Encad and Colorspan. The warranted period varies from type of application and type of overlaminate from 18 months up to 5 years. For full details, see our Avery® IPM™ Outdoor warranty.



www.averygraphics.com

Graphics Division
Plandijk 88, P.O. Box 118
2394 ZG Hazerswoude - The Netherlands
Tel +31 71 3421500 - Fax +31 71 3421538

PRODUCT CHARACTERISTICS

Avery® IPM™ 2031

Physical properties

| Features | Test method ¹ | Results |
|-------------------------|---|----------------------------|
| Caliper, facefilm | ISO 534 | 80 µm |
| Gloss | ISO 2813, 20° | 1% |
| Dimensional stability | DIN 30646 | 0.3 mm. max |
| Adhesion, initial | FINAT FTM-1, stainless steel | 180 N/m |
| Adhesion, ultimate | FINAT FTM-1, stainless steel | 260 N/m |
| Flammability | | Self extinguishing |
| Accelerating ageing | DIN 53587, 500h exposure | No negative impact on film |
| Shelf life | Stored at 22° C/50-55 % RH | Performance |
| Removability | | 2 years |
| Not when applied to: | | up to 1 year |
| | | |
| Durability ² | Overlaminated with DOL 4300 | 5 years |
| | Overlaminated with DOL 1000, DOL 1100 | |
| | with overlaps | 3 years |
| | Overlaminated without overlaps | |
| | for static applications only | 2 years |
| | Without overlaminate and used for static, | |
| | Non-abrasive application ONLY | 18 months |

Only when printed with ENCAD GO, HP and Colorspan pigmented inks and when properly applied in accordance with our application instructions. Only applicable for vertical exposure.

Temperature range

| Features | Results |
|-------------------------|----------------|
| Application temperature | Minimum: +10°C |
| Service temperature | -20°C to +80°C |

Important

Information on physical and chemical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

All technical data are subject to change. In case of any ambiguities or differences between the English and foreign versions of these Conditions, the English version shall be controlling.

Warranty

Avery® branded materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give any guarantee, warranty, or make any representation contrary to the foregoing.

All Avery® branded materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

1) Test methods

More information about our test methods can be found on our website.

2) Durability

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.



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